Amendments to the Drawings:

The attached sheet of drawings includes changes to the figure. The handwritten notations have been eliminated.

Attachment: Replacement Sheet

REMARKS

In response to the objection of the drawings set forth at page 2 of the Office Action, a replacement sheet is submitted herewith containing a new rendition of the figure, in which the handwritten notations have been eliminated. With regard to the designation 3a, Applicants note that this reference numeral has been used consistently in the drawing to designate only the memory, each of the control units having been designated by the reference numeral 3. In the control unit at the upper right in the figure, the memory is depicted as being incorporated with the control unit, but is still consistently designated by the reference numeral 3a. If nevertheless, the Examiner remains of the view that this designation needs to be changed, clarification is respectfully requested.

Claims 1-20 have been rejected under 35 U.S.C. §102(a) as anticipated by Brunts et al (U.S. Patent No. 5,887,269). However, for the reasons set forth hereinafter, Applicants respectfully submit that all claims which remain of record in this application distinguish over the Brunts et al reference.

The present invention is directed to a method and apparatus for storing control unit data, such as program code for sequence control or characteristic diagram control of a control unit in a vehicle. In modern vehicles, many such control units are conventionally provided, for controlling individual systems on board the vehicle, such as air conditioning, automatic transmission, brakes,

lights, audio equipment, locks, etc. Such control units are normally coupled in data communication by a high speed communications link, such as a data bus or the like.

As noted in paragraph [0005] of the specification of the present application, when it becomes necessary to update or replace control unit data which are stored in memories associated with the various control units onboard the vehicle, it is conventional to implement such updating via a diagnostic interface of the motor vehicle, which is a relatively slow communication device.

The present invention addresses and resolves the latter problem by reading the updated control unit data from a portable data carrier device, such as a CD or the like, and communicating the control unit data thus acquired to the appropriate control unit via the high speed communication link which couples the respective control units onboard the vehicle. This process is controlled by a processor, advantageously a program controlled microprocessor, which causes the reader unit to read the required data from the data carrier, and controls transmission of that data to the proper control unit via the data bus. In this manner, a high speed input of information is achieved. According to one embodiment of the invention, the processor reads out and processes storing and/or updating instructions stored on the data carrier, including storing and/or updating sequence control.

The Brunts et al reference on the other hand, discloses a navigation system in which a transportable memory card may be used to provide a user modifiable data base. For this purpose, a reading device is provided for reading information (for example, address information) from a data carrier, such as a memory card. (See Column 7, lines 12-16; and lines 50-52; Column 12, lines 45-47.) The information read in this manner may be stored in a random access memory 96 for use by the navigation system and used to generate navigation instructions to the vehicle operator.

As can be seen from the foregoing brief description, the Brunts et al reference appears to be similar to the present invention to the extent that it uses an interface device to read information from a portable data storage unit in order to provide information for the operation of an onboard vehicle system (in particular, a navigation system). However, Brunts et al fails to teach or suggest a system in which the storing or updating process is carried out under the control of a program-controlled microprocessor according to storing and/or updating instructions read from the data carrier, as recited in Claim 8. In addition, Brunts et al also fails to teach or suggest a system in which control unit data are selectively read from a media carrier under control of a data processor, which controls communication of the control unit data to a selected control unit via a high speed communication data bus on board the vehicle, as recited in Claims 14, 16 and 21. In particular, Claim 14 recites that the data processor is

coupled in data communication with the control unit via a data bus system in the vehicle, and "communicates said control unit data to said control unit via said data bus system in accordance with instructions read from said data carrier, for storing and/or updating sequence control in said data processor". Similarly, Claim 21 recites that the data processor is "programmed to cause said interface device to read selected control unit data from a memory unit coupled in communication with said interface device, and to communicate said selected control unit to said control unit via said high speed data link" on board the vehicle.

Claim 16, on the other hand, recites that a step of "communicating said control unit data to said control unit via said data bus".

The Brunts et al reference does not appear to provide for internal communication of selected data within the vehicle via a high speed data bus of the type commonly provided in vehicles, as noted previously. Rather, insofar as Applicants have been able to determine, the Brunts et al apparatus merely communicates the destination information into the RAM 96 (Figure 4), as noted previously, in a manner which is not otherwise described. While a "bus" 80 is shown in Figure 3, there appears to be nothing in the text of Brunts et al which suggests that the data bus is used for this purpose, or to communicate control unit data to other control units via the data bus under control of a programmed controlled microprocessor, as recited in the claims of the present application.

While it is conventional, as noted previously to provide such high speed data communication buses on board modern vehicles, heretofore, the concept of utilizing such a high speed internal data bus in conjunction with a media reader interface and a controlling microprocessor to read information from an external data carrier in order to update data contained in one of the control units, is new. As noted in the text of the present application, this system is substantially faster than the old system, which involved the use of special diagnostic interfaces. In the absence of any teaching or suggestion of such a system in the cited Brunts et al reference, Applicants respectfully submit that the claims in the present application distinguish over that reference.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #080437.53242US).

Respectfully submitted,

Gary R. Edwards
Registration No. 31,824

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
GRE:kms
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